APPENDIX B: CURRENT WSDOT ITS PROJECTS

PROPOSED ITS PROJECTS FOR WASHINGTON STATE: MARCH, 2002

Contact:
Pete Briglia, ITS Program Manager
Washington State Department of Transportation
(206) 543-3331, BRIGLIA@U.WASHINGTON.EDU

This list reflects the priorities of our ITS program which include the deployment of Advanced Transportation Management Systems (ATMS) and Advanced Traveler Information Systems (ATIS). Areas of priority within the ATMS category include the deployment of freeway management infrastructure and the integration of WSDOT and local agency traffic signal systems. In the ATIS category, our priority is the deployment of systems to improve safety in rural areas by warning motorist of adverse weather and road conditions.

SAFETY PROJECTS

TITLE: CRITIAL DATA COMMUNICATIONS SYSTEM ENHANCEMENT
OBJECTIVE: The WSDOT/WSP statewide communications microwave backbone is critical infrastructure both for routine day-to-day activities and during emergencies. The system carries business, operations, and public safety communications and data. As WSDOT and WSP move to coordinate statewide operations to better respond to critical needs, a more sophisticated communications infrastructure is needed. This project will enhance the most critical link within the statewide system to permit higher data capacity and more secure data transmission.
COST: $1.1 million
LOCATION: **Thurston County**

TITLE: I-90 TRUCK/WIND WARNING SYSTEM NEAR COLUMBIA RIVER
OBJECTIVE: The Vantage Bridge, which carries I-90 across the Columbia River, is frequently subjected to very high cross winds. These winds can make it difficult for large trucks to safely traverse the span. The bridge has a history of semi-trailer, blow-over accidents. In addition, trucks approaching the bridge from the east must negotiate a sweeping turn onto the bridge at the end of a long downhill grade. This project will install a safety system comprising weigh-in-motion and radar detection along with a variable message sign to warn truckers that are traveling too fast to slow down. It will also install a real time high wind warning system.
COST: $250,000
LOCATION: GRANT COUNTY

TRANSPORTATION EMERGENCY OPERATIONS PROJECTS

TITLE: REMOTE TRAFFIC OPERATIONS CENTER FOR SECURITY AND EMERGENCY APPLICATIONS
OBJECTIVE: WSDOT's Puget Sound area traffic operations center (commonly called the TSMC) is a vital component of the region's plan to manage the ground transportation system during major emergencies. This project will develop a remote, virtual traffic operations center that would allow WSDOT to move the control of the existing TSMC to a remote location such as the Emergency Operations Center (EOC) at Camp Murray when needed.
COST: $500,000
LOCATION: **King County**

CONGESTION RELIEF PROJECTS

TITLE: VANCOUVER AREA SMART TREK OPERATIONS AND COMMUNCATIONS EXPANSION AND TRAVELER INFORMATION INTEGRATION

OBJECTIVE: The Clark County region currently has a small number of cameras and detectors on the freeway system. The project will install additional equipment on I-5, I-205 and SR-14. The additional equipment will have several benefits. These include improved freeway management with expanded incident detection and response capabilities, notification to the public of traffic conditions and alternate routes, and the deployment of a comprehensive congestion map of real time traffic information. The project will also include connecting Oregon DOT, C-TRAN and the City of Camas to the regional communications network and integrating the exchange of information between all the key transportation agencies in the area.

COST: $1.75 million
LOCATION: **Clark County**

TITLE: TRI-CITIES ADVANCED TRAFFIC MANAGEMENT SYSTEM

OBJECTIVE: This project will provide the operational and communication infrastructure that will interconnect the traffic signal systems of WSDOT and the cities within the Tri-Cities area (Richland, Pasco, and Kennewick). This will allow the multiple systems to work in concert providing operational efficiencies that will reduce traffic delay and motorist frustration.
COST: $1.0 million
LOCATION: **Benton and Franklin Counties**

TITLE: OLYMPIA ARTERIAL ADVANCED TRAFFIC MANAGEMENT SYSTEM

OBJECTIVE: This project will provide the operational and communication infrastructure that will interconnect the traffic signal systems of WSDOT and the City of Olympia. This will allow the two systems to work in concert providing operational efficiencies that will help reduce traffic delay and motorist frustration.
COST: $1.0 million
LOCATION: **Thurston County**

TITLE: SEATTLE INCIDENT AND OPERATIONS DEPLOYMENT

OBJECTIVE: Seattle is and will be experiencing several major road construction projects that significantly impact traffic for extensive periods. Incident response and clean up also frequently impedes traffic operations. The project would provide portable traffic operations ITS infrastructure that could be deployed on a temporary basis to improve traffic operations during construction, incidents and major events. This project will also expand the city's existing traffic camera system to principle city routes such as the West Seattle Freeway. This will provide more timely information on traffic conditions, better system wide traffic management coordination, and increased security monitoring of several critical transportation facilities within the city.
COST: $1.2 MILLION
LOCATION: **King County**

TITLE: SPOKANE TRAFFIC OPERATIONS FOR ARTERIALS

OBJECTIVE: The Spokane area has undertaken a comprehensive effort to provide a regional traffic operations system. The system will monitor the state highway system within the area and

provide operating agencies and the public with important information about traffic conditions and problems. This project will integrate Spokane area arterials into the regional operations system making it a truly comprehensive regional operational system.
COST: $1.2 million
LOCATION: **Spokane County**

TITLE: MAJOR EVENT PARKING ADVISORY SYSTEM
OBJECTIVE: Special event bound drivers approaching the three major event venues in downtown Seattle would benefit from improved guidance and information about available parking. The project would implement guidance signs with parking garage space availability information to inform drivers of their choices thereby reducing unnecessary traffic circulation. This project will also deploy a traffic information radio broadcast system for timely information on event parking, traffic congestion, construction and incident information. Overall, these systems would reduce unnecessary delay and related congestion, and reduce traffic conflicts.
COST: $1.1 million
LOCATION: **King County**

TRAVELER INFORMATION PROJECTS

TITLE: VARIABLE SPEED LIMIT SYSTEM ON STEVENS PASS, US-2
OBJECTIVE: In 1996 WSDOT installed a Variable Speed Limit system across Snoqualmie Pass on I-90 through the Cascade Mountains. This system adjusts the legal speed limit of the roadway based on prevailing weather conditions and congestions patterns. The system, which was installed to reduce winter accidents, has been proven to be very effective, reducing accidents and reducing weather related congestion. This project will install a functionally similar variable speed limit system on the high accident corridor on US-2 on Stevens Pass.
COST: $750,000
LOCATION: **Chelan County**

TITLE: US-395 COLUMBIA RIVER BRIDGE TRAFFIC OPERATIONS AND TRAVELER INFORMATION SYSTEM
OBJECTIVE: The Blue Bridge on US-395 across the Columbia River connects Pasco and Kennewick and is a critical transportation link for the Tri-Cities. It experiences heavy congestion and has a high accident rate. This project will install monitoring equipment, signs and communications on the structure to help alleviate these problems. The system will be tied into WSDOT's regional traffic operational center.
COST: $500,000
LOCATION: **Benton County**

TITLE: CENTRAL WASHINGTON TRAVELER INFORMATION VARIABLE MESSAGE SIGN (VMS) SYSTEMS
OBJECTIVE: Variable message signs installed along the highway deliver important accident, construction delay, and weather information to motorists. This project will allow WSDOT's regional operations center in Union Gap to communicate with motorists and truckers on several critical transportation links in Central Washington using variable message signs. Locations include I-90 near Moses Lake, US-97 near Oroville, and SR-243 near Beverly.
COST: $1.0 million

LOCATION: **Adams and Grant Counties**

TITLE: I-82 YAKIMA AREA TRAVELER INFORMATION SYSTEM
OBJECTIVE: This project will install variable message signs and highway advisory radio systems in the I-82 and US-12 interchange area to advise motorists of construction activities, congestion and accident information and hazardous road and weather conditions. The system will be connected to WSDOT's regional highway operations center in Union Gap.
COST: $500,000
LOCATION: **Yakima County**

TITLE: I-5 THROUGH NISQUALLY VALLEY - ICE WARNING SYSTEM.
OBJECTIVE: Interstate 5 through the Nisqually Valley has one of the highest frequencies of ice related accidents in the Tacoma/Olympia area. This project will install weather information stations, cameras, and changeable message signs that will be used to monitor pavement and traffic conditions and provide real-time information to motorists traveling through this area. This system will be integrated into the WSDOT Road and Weather Information System (RWIS) and the Olympic Region Traffic Management Center operations. This system will also be integrated with and enhance the existing highway advisory radio systems installed in this area.
COST: $500,000
LOCATION: **Thurston and Pierce Counties**.

TITLE: SR14 TRAVELER INFORMATION ENHANCEMENTS
OBJECTIVE: State Highway 14 east of Vancouver takes travelers on a breathtaking highway through the beautiful and historically rich Columbia River Gorge. The winding narrow road is heavily traveled by tourist and commercial vehicle traffic and is often subject to difficult weather conditions. This project will install variable message signs and highway advisory radios within the corridor to advise motorists of traffic and weather conditions on this highway. The system will be tied into the regional highway operations center in Vancouver that will provide travel condition information to the local media and on the Internet.
COST: $250,000
LOCATION: **Skamania County**